REMARKS

By this Amendment, claims 1-12 and 16-27 are amended. Claims 13-15 remain in the application. Thus, claims 1-27 are active in the application. Reexamination and reconsideration of the application are respectfully requested.

The specification and abstract have been carefully reviewed and revised in order to correct grammatical and idiomatic errors in order to aid the Examiner in further consideration of the application. The amendments to the specification and abstract are incorporated in the attached substitute specification and abstract. No new matter has been added.

Also attached hereto is a marked-up version of the substitute specification and abstract illustrating the changes made to the original specification and abstract.

Replacement formal drawings of Figures 1-18 are submitted concurrently herewith under a separate cover letter in order to label the "Initialize Receipt List" step in the flowchart of Figure 7 with reference numeral "S301" instead of reference numeral "301." Approval of the replacement formal drawings is respectfully requested.

In item 2 on page 2 of the Office Action, claims 1, 8-11, 16 and 23-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Katz et al. (U.S. 5,926,624) in view of Richter et al. (U.S. 5,623,490).

Without intending to acquiesce to this rejection, independent claims 1, 16, 23 and 27 have each been amended in order to more clearly illustrate the marked differences between the present invention and the applied references. Accordingly, the Applicant respectfully submits that the present invention is clearly patentable over the applied references for the following reasons.

The present invention provides a portable viewing/listening system which includes a fixedly or semi-fixedly installed main device and an easy-to-carry portable device. The main device is operable to receive program data, and the portable device is operable to play-back the received program data so as to provide a user with the program data. The present invention also provides a method for transferring program data that is received by a fixedly or semi-fixedly installed main device to an easy-to-carry portable device.

The main device includes receiving means for receiving program data which is provided through broadcasting. The main device also includes demultiplexing means for demultiplexing the program data received by the receiving means into program components, where each program component represents data of a multimedia type and spans a same play-back length as the program data.

For instance, as described in lines 20-24 on page 23 of the original specification (lines 18-23 on page 18 of the substitute specification), in the main device of the portable viewing/listening system of the present invention, each broadcasted program data that is received by the receiving means is constituted by a plurality of program components, such as video, audio and closed caption.

Further, as described beginning in line 12 on page 25 of the original specification (line 25 on page 19 of the substitute specification), the demultiplexing means demultiplexes the program data into program components, where each program component represents data of a multimedia type, such as those described above, and, as exemplified in Figure 6 of the application, has the same play-back length of the program data.

The main device of the portable viewing/listening system of the present invention also includes primary storing means for storing the program components constituting the program data that is received by the receiving means, and transfer priority assigning means for assigning a transfer priority and class to each program component constituting the program data stored in the primary storing means. Further, the main device also includes transferring means for discretely transferring, to the portable device, each of the program components of the program data stored in the primary storing means in the direction of a time axis in order of the transfer priority assigned by the transfer priority means assigned to each program component of the stored program data.

The portable device of the portable viewing/listening system of the present invention includes secondary storing means for storing the program components to be discretely transferred from the transferring means, and re-constructing means for re-constructing data to be played-back from the program components constituting the program data stored in the secondary storing means.

Further, the portable device also includes replacing means for substituting, when the program data stored in the secondary storing means contains an incomplete program component, the incomplete program component at a point of discontinuation of the incomplete program component with a corresponding remainder portion of another program component in a same class as the incomplete program component.

For instance, as explained in steps S407-410 beginning at line 13 on page 46 to line 11 on page 48 of the original specification (line 11 on page 35 to line 21 on page 36 of the substitute specification) and as illustrated in Figure 8, there may be a case where the transfer of program components of a program data from the main device to the portable device is interrupted for various reasons, whereby some of the program components constituting the program data are fully transferred and some of the program components constituting the program data are not completely transferred. In such a case, when the replacing means (CPU 209) extracts each program component constituting the program data to be played-back, the replacing means selects a fully transferred program component whose assigned class is the same as the class of the incompletely program component. The replacing means replaces the non-transferred (missing) portion of the incomplete program component with the corresponding portion from the selected program component.

Accordingly, during play-back of the program data, the incomplete program component constituting the program data is played-back until the point of the transfer interruption. When the point of discontinuation (tail) of the incomplete program component is reached, the corresponding replacement program component begins to be played-back, not from the beginning of the replacement program component, but from the continuation point of the incomplete program component.

For example, as described beginning at line 14 on page 52 to line 12 on page 56 of the original specification (line 22 on page 39 to line 18 on page 42 of the substitute specification), Program 1 is constituted by four program components: closed caption C1 having a "script" class; audio A1 having a "script" class; digest video D1 having a "display" class; and detailed video V1 having a "display" class. As shown in Figure 11b, C1, A1, and D1, having transfer priorities of 1, 2 and 3, respectively, are fully transferred from the main device to the portable device. However, V1, having a transfer priority of

4, is only half-transferred due to an interruption during transmission. During play-back of Program 1, V1 is played-back until its point of discontinuation is reached. Thereafter, D1, which is in the same class ("display") as V1, is selected by the replacing means to be played-back for the missing portion of V1 beginning at the point of discontinuation of V1.

Similarly, if the transfer interruption occurring during the transfer of A1 and after the complete transfer of C1, during the play-back of Program 1, A1 is played-back until its discontinuation point is reached, and C1 is selected by the replacing means to be played-back for the missing portion of A1 beginning at the point of discontinuation of A1.

Accordingly, the portable viewing/listening system of the present invention allows the user to enjoy the entire play-back length of the program data even if one or more of a plurality of program components constituting the program data are incomplete due to an interruption in the transfer of the program data from the main device to the portable device.

Claim 1 recites the portable viewing/listening system of the present comprising the fixedly or semi-fixedly installed main device and the easy-to-carry portable device. Claim 16 recites the main device which is used in a state of being fixedly or semi-fixedly installed and which is used to transfer any received program data to an easy-to-carry portable device. Claim 23 recites the portable device for receiving and playing-back program data received by a fixedly or semi-fixedly installed main device so as to provide a user with the received program data.

Claims 1 and 16 each recite the main device as comprising demultiplexing means for demultiplexing the program data received by the receiving means into program components, where each program component represents data of a multimedia type and spans a same play-back length as the program data.

Claims 1 and 23 each recite the portable device comprises replacing means for substituting, when the program data stored in the secondary storing means contains an incomplete program component, the incomplete program component at a point of discontinuation of the incomplete program component with a corresponding remainder

portion of another program component in a same class as the incomplete program component.

Claim 27 recites a method of transferring program data received by a fixedly or semi-fixedly installed main device to an easy-to-carry portable device. The method of claim 27 comprises demultiplexing the received program data into program components, where each program component represents data of a multimedia type and spans a same play-back length as the program data.

Katz et al. discloses a network based digital information library system which employs authentication, targeting and encryption protocols for the secure transfer of digital information library programs to a client computer system and a mobile playback device which is removably connected to the client computer system. In particular, Katz et al. discloses that the client computer requests and receives, upon proper authentication, a download of a selected file from the library server, and the client computer downloads the requested file to the mobile playback device.

Richter et al. discloses a digital communication system in which multiple media data sources are time multiplexed into a packetized data stream. Richter et al. discloses that each data type packet is assigned a priority between 0 and 10000, where 0 is the highest priority and 10000 is the lowest priority. For instance, an audio packet is given priority 20, a video packet is given priority 50, and screen data packets and file data transfer packets are both given priority 180. Richter et al. also discloses that before the packets are transmitted, the packets are identified for what type of data is included in the packet, and each packet is placed in a queue according to priority order. As new packets are generated, the queue is reorganized so that the new packet is placed into its proper priority order. Richter et al. also discloses that a continuous playback is maintained at the receiver side by delaying the playback of data having a lower priority and processing the playback of data having a higher priority to the exclusion of lower priority packets.

However, neither Katz et al. nor Richter et al. disclose, suggest or even contemplate demultiplexing means for demultiplexing the program data received by the receiving means into program components, <u>where each program component represents data of a multimedia type and spans a same play-back length as the program data</u>, as recited in claims 1 and 16. Similarly, neither Katz et al. nor Richter et al. disclose or

suggest demultiplexing the received program data into program components, <u>where each</u>
<u>program component represents data of a multimedia type and spans a same play-back</u>
<u>length as the program data</u>, as recited in claim 27.

Moreover, Katz et al. and Richter et al. each do not disclose or suggest <u>replacing</u>
<u>means for substituting, when the program data stored in the secondary storing means</u>
<u>contains an incomplete program component, the incomplete program component at a</u>
<u>point of discontinuation of the incomplete program component with a corresponding</u>
<u>remainder portion of another program component in a same class as the incomplete</u>
<u>program component</u>, as recited in claims 1 and 23.

Accordingly, neither Katz et al. nor Richter et al. disclose or suggest each and
every limitation of claims 1, 16, 23 and 27. Thus, no obvious combination of Katz et al.
and Richter et al. would result in the inventions of claims 1, 16, 23 and 27 since Katz et
al. and Richter et al., either individually or in combination, fail to disclose or suggest
each and every limitation of claims 1, 16, 23 and 27.

Therefore, claims 1, 16, 23 and 27 are clearly patentable over Katz et al. and
Richter et al.

In item 8 on page 5 of the Office Action, claims 12-15 were rejected under 35
U.S.C. § 103(a) as being unpatentable over Katz et al. in view of Richter et al. and further
in view of Kono (U.S. 5,914,706). In item 4 on page 7 of the Office Action, claims 2-6
and 17-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Katz et al.
in view of Richter et al. and further in view of Ueda et al. (U.S. 5,835,789). Further, in
item 10 on page 10 of the Office Action, claims 7 and 22 were rejected under 35 U.S.C. §
103(a) as being unpatentable over Katz et al. in view of Richter et al. and further in view
of Bonomi (U.S. 5,577,191).

As described above, Katz et al. and Richter et al., either individually or in
combination, clearly fail to disclose or suggest each and every limitation of claims 1, 16,
23 and 27. However, Kono, Ueda et al. and Bonomi, either individually or in
combination, clearly fail to cure the deficiencies of Katz et al. and Richter et al. for
failing to disclose or suggest each and every limitation of claims 1, 16, 23 and 27.

Therefore, no obvious combination of Katz et al., Richter et al., Kono, Ueda et al.
and Bonomi would result in the inventions of claims 1, 16, 23 and 27 since Katz et al.,

Richter et al., Kono, Ueda et al. and Bonomi, either individually or in combination, fail to disclose or suggest each and every limitation of claims 1, 16, 23 and 27.

Accordingly, claims 1, 16, 23 and 27 are clearly patentable over Katz et al., Richter et al., Kono, Ueda et al. and Bonomi.
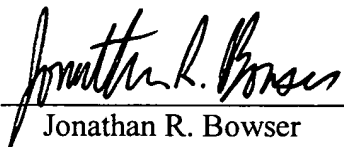
Furthermore, it is submitted that the clear distinctions discussed above are such that a person having ordinary skill in the art at the time the invention was made would not have been motivated to modify Katz et al., Richter et al., Kono, Ueda et al. and Bonomi in such as manner as to result in, or otherwise render obvious, the present invention as recited in claims 1, 16, 23 and 27. Therefore, it is submitted that the claims 1, 16, 23 and 27, as well as claims 2-15, 17-22 and 24-26 which depend therefrom, are clearly allowable over the prior art as applied by the Examiner.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is respectfully solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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AMENDMENTS TO THE DRAWINGS

Replacement formal drawings of Figures 1-18 are submitted concurrently herewith under a separate cover letter.